Mathematical Biosciences

Mathematical Biosciences is abstracted or indexed in Applied Mechanics Review, Biological Abstracts, CABS Current Awareness in Biological Sciences, Chemical Abstracts, Current Contents, Engineering Index, Excerpta Medica, INSPEC, International Abstracts of Biological Sciences, Mathematical Reviews, and Medicus/MEDLINE.

Volume 176

Quantitative Analysis of Gene Expression Data

T. Therneau, R.C. Tschumper and D. Jelinek, Sharpening spots: correcting for bleedover in cDNA array images 1

C. Sabatti, S.L. Karsten and D.H. Geschwind, Thresholding rules for recovering a sparse signal from microarray experiments 17

T.-M. Chu, B. Weir and R. Wolfinger, A systematic statistical linear modeling approach to oligonucleotide array experiments 35

E.N. Lazaridis, D. Sinibaldi, G. Bloom, S. Mane and R. Jove, A simple method to improve probe set estimates from oligonucleotide arrays 53

A. Chilingaryan, N. Gevorgyan, A. Vardanyan, D. Jones and A. Szabo, Multivariate approach for selecting sets of differentially expressed genes 59

A. Szabo, K. Boucher, W.L. Carroll, L.B. Klebanov, A.D. Tsodikov and A.Y. Yakovlev, Variable selection and pattern recognition with gene expression data generated by the microarray technology 71

K.S. Pollard and M.J. van der Laan, Statistical inference for simultaneous clustering of gene expression data 99

F. Chiaromonte and J. Martinelli, Dimension reduction strategies for analyzing global gene expression data with a response 123

I. Aizenberg, E. Myasnikova, M. Samsonova and J. Reinitz, Temporal classification of *Drosophila* segmentation gene expression patterns by the multi-valued neural recognition method 145

Author index 161

Subject index 162

Contents continued on next page

Elsevier

Mathematical Biosciences

Contents continued from previous page

D. Verotta and F. Schaedeli, Non-linear dynamics models characterizing long-term virological data from AIDS clinical trials 163

W.S. Hlavacek, J.K. Percus, O.E. Percus, A.S. Perelson and C. Wofsy, Retention of antigen on follicular dendritic cells and B lymphocytes through complement-mediated multivalent ligand–receptor interactions: theory and application to HIV treatment 185

S. Bensmaïa, A transduction model of the Meissner corpuscle 203

A. Szabo and K. Boucher, Estimating an oncogenetic tree when false negatives and positives are present 219

Q. Zheng, Statistical and algorithmic methods for fluctuation analysis with SALVADOR as an implementation 237

H.K. Tilakaratne, S.K. Hunter and V.G.J. Rodgers, Mathematical modeling of myoglobin facilitated transport of oxygen in devices containing myoglobin-expressing cells 253

Volume Contents

Guide for Authors

Elsevier